



UNITED STATES PATENT AND TRADEMARK OFFICE

mn
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,663	10/28/2003	Wei Jung-Tsung	US212916-1 (17494/124)	4236
23595	7590	08/11/2004	EXAMINER	
NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402			EVANISKO, LESLIE J	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,663

Applicant(s)

JUNG-TSUNG, WEI

Examiner

Leslie J. Evanisko

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

AC

DETAILED ACTION

Drawings

1. Figures 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. Attention is invited to page 1, line 7 through page 2, line 14 and the brief descriptions of Figures 1-6 on page 3 of the specification. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because of the following informalities: Lines 11-14 of the abstract on page 8 should be deleted since items such as a representative figure and brief descriptions of the numerals are not appropriate items for the abstract. Correction is required. See MPEP § 608.01(b).

Art Unit: 2854

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2854

5. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter recited in claim 1 with respect to the sensing and activating circuit appears to be inconsistent with the disclosed key structure. In particular, claim 1 appears to be reciting both a sensing and activating circuit installed on a bottom part of the keys and an activating circuit on the circuit board. However, it appears that the disclosure only supports sensing and activating circuits being provided on the circuit board and that the lower end of the key body is broadly "connected to" these sensing circuits. See, for example, the description in lines 7-18 of page 4. Furthermore, it is noted that applicant states on page 2, lines 19-20 that the invention enables direct contact of the key with a circuit on a circuit board. Therefore, it appears that the language of claim 1 regarding the installation of a sensing and activating circuit on the lower part of the key is not supported by the disclosure.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-5 have several problems and inconsistencies that render the exact scope of the claims unclear.

Firstly, with respect to claim 1, it is noted that the preamble and the body of the claim are not consistent, thereby making it unclear as to what applicant is intending for the scope of the claims to encompass. Specifically, the preamble of claim 1 is drawn to a structural improvement of a push key. However, the body of the claim then recites additional structure that is not part of a push key per se--such as a plurality of keyholes on a faceplate-- and also recites a plurality of push keys in the keyholes, which appears to change the scope of the claim from being directed to a single push key to including a plurality of push keys. The language of the claims repeatedly goes back and forth between referring to a singular key and plural keys, making the exact scope of the claims unclear.

Secondly, with respect to claim 1, the above noted inconsistency between the disclosed structure and claimed structure regarding the sensing and activating circuits renders the scope of claim 1 unclear. See the comments regarding this matter set forth in the 35 USC 112, first paragraph rejection.

Also in claim 1, the term "circuit board keys" in line 4 is not clear in meaning. In particular, what is a circuit board key? This term is not clearly

defined by the claim or in the specification. Furthermore, the terms “the push key” in line 1 and “the circuit board” in lines 6-7 have no proper antecedent basis since these structures were not previously recited in the claim.

Additionally, the phrase “the key becomes a key body...” in lines 7-8 of the claim is confusing and awkward. It is not clear from this language whether applicant is intending to recite some kind of forming or process step. It is suggested that the term --of-- be inserted after “approaching” in line 7 since it appears that this term was inadvertently left out. Additionally, it is suggested that the applicant use the more recognized Markush language “selected from the group consisting of...” for the language in line 5.

With respect to claims 3-5, each of these claims appears to be improperly modifying the scope of claim 1 rather than further limiting the scope of claim 1. In particular, it is noted that claims 3-5 are directed to the embodiments shown in Figures 9-15. However, it appears that claim 1 is not a generic claim, but drawn to the specific embodiments shown in Figures 7 and 8 since it includes the recitation that the lower end of the key is connected to an activating circuit. The embodiments shown in Figures 9-15 do not have the lower end of the key connected to the activating circuit since the touch spot in each of the various embodiments in Figures 9-15 is connected to the activating circuit. See, for example, the language on page 5, lines 8-9 of the specification. Therefore, it appears that claims 3-5 are improperly modifying claim 1 and render the exact scope of all of these claims unclear.

Additionally, in claim 3, the phrase “optionally provided” in line 2 renders the scope of the claim unclear as to whether the arched protrusion and touch spot on the arched protrusion are necessary to meet the claim language. Also, the term “the circuit board” in lines 3-4 has no proper antecedent basis since the circuit board was never positively recited in the claims.

With respect to claims 4 and 5, again, the term “the circuit board” in each of these claims has no proper antecedent basis. Additionally, the term “the touch point” in claim 5 has no proper antecedent basis since only a touch spot was previously recited. Finally, it appears that the term “an activating circuit” in each of claims 4 and 5 should be deleted and replaced with --the activating circuit-- since the activating circuit was previously recited in claim 1.


Due to the extreme indefiniteness of the claims, the exact scope of the claims could **not** reasonably be determined by the Examiner at this time. Although a prior art search was conducted, application of any relevant prior art could not be completed since the scope of the claims could not be ascertained. An examination of the claims with respect to the prior art will be completed when the claims are in proper compliance with 35 USC 112 and their scope can be reasonably ascertained. Please note that any prior art rejection under 35 USC 102 or 103 that may be presented in the next Office Action may be made FINAL.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(571) 272-2161**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leslie J. Evanisko
Primary Examiner
Art Unit 2854

lje
August 6, 2004